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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,544	09/28/2001	Gan-Moog Chow	N.C. 82,637	3267
26384 75	590 02/07/2003			
NAVAL RESEARCH LABORATORY			EXAMINER	
ASSOCIATE COUNSEL (PATENTS) CODE 1008.2			SAVAGE, JASON L	
4555 OVERLO WASHINGTO	OK AVENUE, S.W. N, DC <u>-20375</u> -5320		ART UNIT	PAPER NUMBER
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			DATE MAILED: 02/07/2003	6

Please find below and/or attached an Office communication concerning this application or proceeding.

2.0		Amiliantina	Applicant(s) AS
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	Advisory Action	09/964,544	CHOW ET AL.
		Examiner	Art Unit
	The MAILING DATE f this communication ap	Jason L Savage	
Therefore, inal reject condition fexamination	he period for reply expires 3 months from the mailing d	avoid abandonment of this (1) a timely filed amendment eal (with appeal fee); or (3 REPLY [check either a) or ate of the final rejection.	s application. A proper reply to a ent which places the application in a timely filed Request for Continued EST AVAILABLE CO. b)]
no 70 70 Extension ee have bee ee under 37 2) as set for	he period for reply expires on: (1) the mailing date of this of event, however, will the statutory period for reply expiritually CHECK THIS BOX WHEN THE FIRST REPLY W. 06.07(f). Ons of time may be obtained under 37 CFR 1.136(a). The filled is the date for purposes of determining the period CFR 1.17(a) is calculated from: (1) the expiration date the in (b) above, if checked. Any reply received by the Omay reduce any earned patent term adjustment. See 37 the several patent term adjustment.	re later than SIX MONTHS from AS FILED WITHIN TWO MONT the date on which the petition und d of extension and the correspond of the shortened statutory period office later than three months after	the mailing date of the final rejection. HS OF THE FINAL REJECTION. See MPEP der 37 CFR 1.136(a) and the appropriate extension and amount of the fee. The appropriate extension for reply originally set in the final Office action; or
37 (lotice of Appeal was filed on Appellan CFR 1.192(a), or any extension thereof (37 C	FR 1.191(d)), to avoid dis	
2.☐ The	proposed amendment(s) will not be entered	because:	
(a) 🗌	they raise new issues that would require furt	ther consideration and/or	search (see NOTE below);
, ,	they raise the issue of new matter (see Note		
(c) 🗌	they are not deemed to place the application issues for appeal; and/or	n in better form for appeal	by materially reducing or simplifying the
(d) 🗌	they present additional claims without cance NOTE:	eling a corresponding num	nber of finally rejected claims.
3.□ App	licant's reply has overcome the following reje	ction(s):	
	vly proposed or amended claim(s) wou nceling the non-allowable claim(s).	ld be allowable if submitte	d in a separate, timely filed amendment
	a) affidavit, b) exhibit, or c) request folication in condition for allowance because: \S		en considered but does NOT place the
	affidavit or exhibit will NOT be considered be sed by the Examiner in the final rejection.	ecause it is not directed So	OLELY to issues which were newly
	purposes of Appeal, the proposed amendme planation of how the new or amended claims		
The	status of the claim(s) is (or will be) as follows	s:	
Cla	nim(s) allowed:		
Cla	nim(s) objected to:		
Cla	nim(s) rejected: <u>19-25</u> .		
	nim(s) withdrawn from consideration:		
8. The	proposed drawing correction filed on	is a) approved or b) □	disapproved by the Examiner.
9.□ Note	e the attached Information Disclosure Statem	nent(s)(PTO-1449) Paper	No(s)
10.□ Otr	ner:		JOHN J. ZIMMERMAN PRIMARY EXAMINER

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Continuation of 5. does NOT place the application in condition for allowance because: Applicant has not overcome the rejections to the claims. More specifically, Applicant's amendment to claim 23 does not overcome the rejection under 35 USC 112 first paragraph since claim 20 recites that the thin film contain an oxide [emphasis added] while claim 23 contains a conflicting limitation that the thin film may be a metal-metal [emphasis added]. How can the thin film be a metal-metal and also contain an oxide simultaneously? Applicant has also not overcome the rejection to claims 19-25 under 35 USC 103(a).

Applicant argues that Glumac does not disclose any specific particle size of n-materials and that a nanometer particle size can be a particle of a size ranging from a fraction of a nanometer to 1000 nanometers. Thus, applicant believes that Glumac does not actually teach the presently claimed subject matter. However, Applicant's argument appears to affirm the Examiner's rejection. Applicant readily admits that the teaching of Glumac encompasses a wide range of particle sizes which may be any size from 1 nm to 2000 nm, thus obviating the claimed subject matter. Absent a teaching of the criticality of the claimed particle sizes, it does not provide a patentable distinction over the prior art.

Applicant further argues that Glumac does not teach the limitation of claim 22 that the layers are integrated by graded interfaces rather than abrupt interfaces. As was clearly set forth in the rejection, Glumac teaches that the nanophase coating may be multicomponent, multiphasic, compositionally modulated, or continuously graded structures (col. 5, ln. 28-39) which appears to meet the claim limitations. Applicant has failed to demonstrate how or why he feels that this teaching of Glumac does not meet the claim limitations, therefore the rejection has been maintained.

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OHN J. ZIMMERMAN PRIMARY EXAMINER